Technical Attachment

Southeastern Fire and Climate Workshop

Bernard Meisner
Scientific Services Division

The first Southeastern Fire and Climate Workshop was held June 25-27, 2002, in St. Petersburg, Florida, on. Bernard Meisner (SSD), Jim Stefkovich (MIC WFO Jackson) and Charlie Paxton (SOO WFO Tampa Bay Area) attended. The primary goal of the workshop was to bring the land management and climate communities together to initiate a dialog among the groups that would lead to improved climate products, and better use of existing products, to meet the needs of land managers. Ultimately, these climate products would be tailored to specific needs outlined by the land managers in order to improve their usefulness for decision making process.

The foundation for developing this dialog was laid by a set of presentations at the opening of the workshop. Six presentations - three from climate specialists and three from land managers - covered a diverse range of topics. James O'Brien from Florida State University presented some new seasonal forecast products depicting expected Keetch-Byram Drought Index (KBDI) values for Florida with lead times out to six months. Tony Westerling from the Scripps Institute of Oceanography focused on the economic benefit of using similar climate forecasts for land management with examples from the western United States. Kevin Robbins, Director of the Southern Regional Climate Center, revealed some coming developments in how climate data and forecasts may be accessed and distributed in the future.

The three presentations from the land managers focused on the need for climate information from three distinct perspectives, the government land manager (federal/state/local/tribal), the large industrial land owner, and the small industrial land owner. Heath Hockenberry from the National Interagency Fire Center in Boise, Idaho, outlined the potential benefits to government agencies from more effective use of climate information in their assessment of regional wildfire potential. Clay Smallwood (president of St. Joe Timberland Company) and James Malone (Executive Director, Alabama Treasure Forest Association) helped the group shift gears and look at the issue of climate information from the perspective of large industrial land managers and the small industrial (or family) forest land owner.

Following the six introductory presentations, the participants were divided into four work groups to examine how land managers could incorporate climate information into their decision-making process. The groups were asked to address what climate parameters and time scales would be most useful to the land managers and what obstacles needed to be overcome for climatologists to create products to meet these needs. Over the course of the next two days the work groups were tasked with developing a list of action items that would help remove the identified obstacles.

The lists of action items from each group had four core themes:

The need for a standardized fire database.
The need for education/cross-training.
An assessment of current climate products.
Better interpretation of climate forecasts for recommended management decisions.

The need for a standardized fire database was the most pervasive of the common themes. Regional assessment of the impact of climate on fire is virtually impossible due to the different degrees of data availability from the various land management agencies. It was the consensus of the groups that only a regional-to-national initiative to implement a standard fire reporting database, and the migration of historical data to this new format, would remove this obstacle. While the first theme presents a rather daunting task, the other three themes are far more manageable.

Education is perhaps the easiest one to address, as the workshop was a step in that direction. Opening communication lines between these two groups was a good first step. The next step is to provide some cross-training: teach the climatologists about fire (the National Fire Danger Rating System and Fire Family Plus in particular); and teach the land managers about climatology. Many land managers already have a good understanding of meteorology, but need to better understand the difference between meteorology and climatology.

Education will help some in dealing with the last two themes. The current climate forecasts provided by the NCEP Climate Prediction Center (CPC) are not easy to interpret for the non-climatologist, and communicating a sense of their accuracy/confidence is even more difficult. Work is needed to translate the CPC outlooks into information that is more useful to the land managers. This layer of interpretation needs to extend to the presentation of forecast skill/confidence.

The organizers of the workshop hope that the action items developed by the work groups will evolve into proposals to begin removing the barriers which currently limit the usefulness of climate information in the land management decision-making process. Climate forecasting capabilities will continue to improve, much as weather forecasting skill has improved. However, the full benefits of any improvement in climate forecasts will not be realized unless the resulting products address the needs of various end-user communities, such as the land management community.